



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/733,067	12/11/2000	Gi-Young Song	P56237	2758
8439	7590	01/09/2004	EXAMINER	
ROBERT E. BUSHNELL 1522 K STREET NW SUITE 300 WASHINGTON, DC 200051202			PATIDAR, JAY M	
			ART UNIT	PAPER NUMBER
			2862	

DATE MAILED: 01/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/733,067

Applicant(s)

SONG ET AL.

Examiner

Jay M. Patidar

Art Unit

2862

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) 14-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,12,13,30-32,35 and 43-45 is/are rejected.
- 7) ☒ Claim(s) 2,4-11,33,34 and 36-42 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

1. This communication is in response to applicants response filed on October 23, 2003.

2. Applicant's election with traverse of Group I in Paper No. 9 is acknowledged. The traversal is on the ground(s) that all claims define the subject matter of group I and there is no serious burden on the examiner. This is not found persuasive. Examiner agrees with applicant for Groups I and II. However, examiner maintains that there is a restriction requirement between the apparatus claims 1-13,30-45 and method of assembling (manufacturing) a shadow mask claims 14-29. Examiner should have used form para 08-18 instead of form para 8-20-02.

Below is the office action on merit for claims 1-13 and 30-45 (Groups I&II).

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

4. Claims 1,13,31,42 are objected to because of the following informalities:

In claims 1,31, it is unclear as to what is meant by the phrase "each one of said two end...second support member" at line e.g. 13 in claim 1; It is clear from

the e.g. fig.1. that only one end portion of either elastic member is coupled to only one support member.

In claim 13, it is unclear as to whether claim 13 is dependent on claim 10 or 12.

In claim 42, since claim 30 claims e.g. at line 11, "bridges connecting adjacent strips", the subject matter of claim 42 is not true i.e. single slit with no bridges.

Appropriate correction is required.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of JP 4-277448.

Examiner assumes that claim 13 is dependent on claim 12.

As to claim 12, Suzuki discloses e.g. in fig. 1 a shadow mask frame assembly of a color CRT with a plurality of strips; a plurality of bridges; a portion where the bridges are formed and a portion where the bridges are not formed are

alternately disposed in a horizontal direction (Note fig. 1); a first and second support members 11b. Suzuki fails to show the first and second elastic members. '448 is cited to show this feature. '448 shows a first and second elastic members 2 being coupled to the support members (Fig. B). Consequently, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Suzuki to have employed the first and second elastic members as shown in '448 to apply the tension force to the shadow mask.

As to claim 13, the intervals between the bridges in the vertical direction being substantially the same as shown in fig.1.

6. Claims 1,3,30-32,35,43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 11-16511 or Derwent 1994-291642 in view of JP 4-277448.

As to claims 1,3,30-32,35,43-45, '511 or '642 discloses a shadow mask apparatus wherein the slots are being arranged in a first slot group and a second slot group and the first slot group having slots with a wider interval between bridges than the second slot group (figs. 1,2,6 in '511 and fig. 1 in '642). Both references fail to show a first and second elastic member. However, '448 is cited to show this feature. '448 shows a first and second elastic members 2 being coupled to the support members (Fig. B). Consequently, it would have been obvious to one having ordinary skill in the art at the time the invention was made

to modify the device of '642 or '511 to have employed the first and second elastic members as shown in '448 to apply the tension force to the shadow mask.

7. Claim 2,4-11,33,34,36-42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

JP 2-186536; JP 7-230772; US 6,605,890; 6,335,594; 2001/0033130;
2002/0014822; 6,013,400; 2001/0020817 A1.

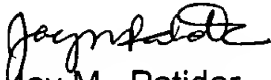
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay M. Patidar whose telephone number is 703-308-6723. The examiner can normally be reached on M-Thur 7:00-5:30.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 09/733,067
Art Unit: 2862

Page 6

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-0956.


Jay M. Patidar
Primary Examiner
Tech Center 2862

January 6, 2004